

**BEFORE
THE PUBLIC SERVICE COMMISSION OF
SOUTH CAROLINA**

DOCKET NO. 2011-271-E

In the Matter of:

Application of Duke Energy Carolinas,
LLC for Authority to Adjust and Increase
Its Electric Rates and Charges

**DIRECT TESTIMONY OF
JANE L. MCMANEUS FOR
DUKE ENERGY CAROLINAS, LLC**

)
)
)
)
)
)
)

1 **I. INTRODUCTION AND PURPOSE**

2 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

3 A. My name is Jane L. McManeus. My business address is 526 South Church Street,
4 Charlotte, North Carolina.

5 **Q. BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6 A. I am Managing Director, Rates for Duke Energy Carolinas LLC (“Duke Energy
7 Carolinas” or the “Company”).

8 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND PROFESSIONAL**
9 **QUALIFICATIONS.**

10 A. I graduated from Wake Forest University with a Bachelor of Science in
11 Accountancy and received a Master of Business Administration degree from the
12 McColl Graduate School of Business at Queens University of Charlotte. I am a
13 certified public accountant licensed in the state of North Carolina and am a
14 member of the Southeastern Electric Exchange Rates and Regulation Section and
15 a member of the EEI Rate and Regulatory Analysts group. I began my career
16 with Duke Power Company (“Duke Power”) (now known as Duke Energy
17 Carolinas) in 1979 as a staff accountant and have held a variety of positions in the
18 finance organizations. From 1994 until 1999, I served in financial planning and
19 analysis positions within the electric transmission area of Duke Power. I was
20 named Director, Asset Accounting for Duke Power in 1999 and appointed to
21 Assistant Controller in 2001. As Assistant Controller I was responsible for
22 coordinating Duke Power’s operational and strategic plans, including
23 development of the annual budget and performing special studies. I joined the

1 Rates Department in 2003 as Director, Rate Design and Analysis. In April 2006,
2 I became Director, Regulatory Accounting and Filings, leading the regulatory
3 accounting, cost of service, regulatory filings, and revenue analysis functions for
4 Duke Energy Carolinas. I began my current position in the Rates Department in
5 October 2006.

6 **Q. PLEASE DESCRIBE YOUR DUTIES AS MANAGING DIRECTOR,**
7 **RATES FOR DUKE ENERGY CAROLINAS.**

8 A. I am responsible for managing Duke Energy Carolinas' rider cost recovery
9 processes, including fuel, renewable compliance and energy efficiency; providing
10 guidance on compliance with regulatory conditions and codes of conduct; and
11 providing regulatory support for retail and wholesale rates.

12 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

13 A. Yes. I testified in Duke Energy Carolinas' base rate proceeding in Docket No.
14 2009-226-E and in several of the Company's annual fuel charge adjustment
15 proceedings, the most recent of which was Docket No. 2010-3-E.

16 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS**
17 **PROCEEDING?**

18 A. My testimony supports the base fuel factor of 2.3935 cents per kWh that the
19 Company has proposed for all customer classes. In addition, I support several
20 other accounting and pro forma adjustments to the Company's test year operating
21 expenses and revenues contained on page 3 of Shrum Exhibit 1.

1 **Q. YOUR TESTIMONY INCLUDES ONE EXHIBIT. WAS MCMANEUS**
2 **EXHIBIT 1 PREPARED BY YOU OR AT YOUR DIRECTION AND**
3 **SUPERVISION?**

4 A. Yes, it was.

5 **Q. DID YOU PROVIDE ANY INFORMATION INCLUDED IN EXHIBITS**
6 **SPONSORED BY OTHER COMPANY WITNESSES?**

7 A. Yes, I provided the proposed fuel rate and annualized fuel expense and certain
8 other pro forma adjustments to the Company's test year operating expenses and
9 revenues shown on Shrum Exhibit 1, page 3.

10 **II. BASE FUEL FACTOR**

11 **Q. WHAT BASE FUEL FACTOR DOES DUKE ENERGY CAROLINAS**
12 **PROPOSE TO USE IN THIS DOCKET?**

13 A. The Company proposes to use a base fuel factor (excluding gross receipts tax and
14 utility assessments) of 2.3935 cents per kWh, which is based on 2010 test period
15 fuel costs. Duke Energy Carolinas proposes to adjust the factor used in this
16 proceeding, as necessary, to conform to the individual factors for residential,
17 general and industrial customer classes approved by the Public Service
18 Commission of South Carolina (the "Commission") when it issues its Order in
19 Docket 2011-3-E (the "Fuel Costs Docket"). The proposed factors are based upon
20 the actual fuel and environmental cost data for the period June 2010 through May
21 2011, and the projected fuel and environmental cost information for the period
22 June 2011 through September 2012, comprising the 16 month review period for
23 the Fuel Costs Docket. The Company's recommended fuel factors by customer

1 class in the Fuel Costs Docket are for the billing period October 2011 through
2 September 2012.

3 **Q. WHAT LEVEL OF FUEL COSTS HAS THE COMPANY INCLUDED IN**
4 **COST OF SERVICE?**

5 A. As shown on McManeus Exhibit 1, page 1, the Company's South Carolina retail
6 adjusted fuel costs expense for the test period, the twelve month period ending
7 December 31, 2010, was \$493,239,000. This amount was calculated using the
8 proposed base fuel cost factor and South Carolina retail test period actual MWh
9 sales, adjusted for weather. The calculated expense was then adjusted to reflect
10 the South Carolina retail level of line loss. I provided this amount to Witness
11 Shrum and it is reflected in the operating expenses shown on Shrum Exhibit 1,
12 page 1.

13 **Q. PLEASE EXPLAIN THE CALCULATION OF THE 2.3935 CENTS/KWH**
14 **FUEL COST FACTOR.**

15 A. McManeus Exhibit 1, page 2, sets forth the determination of the base fuel costs
16 using: (1) normalized 2010 kWh sales and adjusted generation and purchases to
17 supply the sales; (2) projected price of coal; (3) actual test period burned unit fuel
18 prices for oil and gas combustion turbine single cycle; (4) projected cost of
19 combustion turbine combined cycle; (5) nuclear fuel prices that reflect the actual
20 cost of batch fuel expected to be loaded for refuelings during 2011 and 2012; and
21 (6) projected environmental costs. In addition, fuel and environmental costs
22 expected to be recovered through intersystem sales are reflected as a cost offset.
23 In order to hold South Carolina retail customers harmless from the North Carolina

1 Renewable Energy and Energy Efficiency Portfolio Standard (“REPS”), only the
2 avoided fuel cost associated with expected renewable generation and renewable
3 purchased power to meet the REPS requirements were included.

4 **III. PRO FORMA ADJUSTMENTS**

5 **Q. ARE YOU SUPPORTING ANY ACCOUNTING AND PRO FORMA**
6 **ADJUSTMENTS IN THIS PROCEEDING?**

7 A. Yes. As discussed by Company Witness Shrum, I provide support for the revenue
8 and revenue-related operating expense adjustments and the fuel adjustment shown
9 on page 3 of Shrum Exhibit 1.

10 **Q. PLEASE DESCRIBE THESE PRO FORMA ADJUSTMENTS.**

11 A. Line 1 reflects adjustments to revenue, fuel expense, and gross receipts taxes and
12 utility assessments to normalize weather conditions experienced during the test
13 period. Because of extreme temperatures, actual kWh sales were higher during
14 the test period than they otherwise would have been. The effect that temperature
15 variances had on kWh sales was determined and that change in kWh sales was
16 then priced out for each customer class during the test period at the rates in effect
17 during the test year to obtain the adjustment to revenue. Then the related fuel
18 expense and gross receipts taxes and utility assessments due to this adjustment in
19 kWh sales were calculated.

20 Line 8 adjusts revenues to eliminate the estimated unbilled revenue the
21 Company recorded for the difference between kWh sales billed during the test
22 year and kWh used by customers during the test year.

1 Line 12 adjusts expenses to remove amounts that are associated with cost
2 recovery through the Energy Efficiency Rider.

3 Line 13 is the additional South Carolina retail revenues and gross receipts
4 tax and utility assessments required to reflect the annualization of rates in effect
5 on December 31, 2010, adjusted for a composite fuel costs factor of 2.3935 cents
6 per kWh, excluding gross receipts tax and utility assessments.

7 Line 15 adjusts fuel expense in the test period to reflect the generation
8 mix, quantity of fuel, and price of fuel as shown on McManeus Exhibit 1, page 2.
9 The annual fuel expense for fuel clause purposes is calculated using the composite
10 2.3935 cents per kWh fuel costs factor, excluding gross receipts tax and utility
11 assessments, applied to adjusted test period kWh sales.

12 Line 21 adjusts expenses to reflect amortization of deferred pension costs
13 over a 3-year period. The Commission approved the deferral of certain pension
14 costs in its Order Number 2011-511 in Docket 2011-175-E.

15 **Q. PLEASE EXPLAIN WHY YOU BELIEVE THE WEATHER**
16 **NORMALIZATION ADJUSTMENT REFERRED TO ABOVE IS**
17 **APPROPRIATE.**

18 A. The purpose of the Company's weather normalization adjustment in this case is to
19 determine the amount of sustained energy sales within a given test year. The
20 Company will collect its proposed revenue requirements by setting its rates based
21 on the expected level of sustained sales. If rates are established based on sales
22 reflecting extreme weather conditions, the Company may either over or under
23 collect the necessary level of revenue. The Company has made a determination

1 that the weather conditions during the test period were extreme, and therefore the
2 test period sales are not a reasonable estimate of future sales. The Company's
3 weather normalization adjustment excludes those test period sales resulting from
4 extreme weather conditions, so that rates to be implemented in a future period
5 may be set to reflect a level of sales that excludes weather conditions that are
6 unlikely to recur. This practice helps to ensure that the Company's test year
7 revenues are reasonably representative of Duke Energy Carolinas' future
8 revenues.

9 **Q. HOW DID THE COMPANY MAKE THE DETERMINATION THAT**
10 **WEATHER CONDITIONS WERE EXTREME?**

11 A. The Company used a measure of degree days to determine that weather conditions
12 were extreme. Each degree of outside average temperature below the base of 65
13 degrees is one heating degree-day and each degree above the base of 65 degrees
14 is one cooling degree-day. When compared to average temperatures during the
15 last 10 years, 2010 heating degree -days were 14% above average and 2010
16 cooling degree-days were 28% above average. Based on these indicators, it was
17 clear that 2010 was a year of extreme weather that drove up kWh sales well
18 beyond what is reasonable to expect in the future.

19 **Q. WHAT METHOD HAS THE COMPANY USED TO DEVELOP A MORE**
20 **REASONABLE LEVEL OF EXPECTED KWH SALES?**

21 A. In general terms, the process for determining the volume of kwh sales that would
22 be considered reasonable (i.e reflecting normal, recurring energy consumption)
23 requires both the determination of customers' average electricity usage in

1 response to temperature and the determination of average normal temperatures.
2 The Company analyzed its historical kwh sales and historical temperatures in its
3 service area to determine the kwh used by its customers at various temperatures.
4 This analysis was done by type of customer, since customers may respond to
5 temperature differently, and used temperature data collected from 3 weather
6 stations in the Duke service area. Once the relationship between customer kwh
7 usage and temperature was established, this relationship was applied to normal
8 temperatures to determine customer electricity usage that can be expected on a
9 normal recurring basis.

10 **Q. IS THE APPROACH TAKEN OF MAKING THIS WEATHER**
11 **ADJUSTMENT CONSISTENT WITH SOUTH CAROLINA LAW?**

12 A. Yes, it is. South Carolina normally uses the test year for ratemaking based on the
13 assumption that the test year will reflect typical conditions going forward.
14 However, when an unusual situation exists, the test year results must be adjusted
15 in order to better indicate future trends. It is essential to use the best information
16 available in order to best portray the likely results of operations going forward.

17 **Q. PLEASE PROVIDE AN EXAMPLE OF A SITUATION LIKE WHAT YOU**
18 **HAVE DESCRIBED?**

19 A. Since I'm not a lawyer I cannot give a legal opinion; however, I believe that the
20 South Carolina Supreme Court case Hamm v. South Carolina Public Service
21 Commission, 309 S.C. 282, 422 S.E.2d 110 (1992) addressed a similar issue. In
22 this case, the South Carolina Supreme Court reviewed a rate decision by the
23 Commission in which rates were set in part based on test year litigation expenses

1 that the Consumer Advocate argued were abnormally high. The Consumer
2 Advocate made a showing that the test year litigation expenses were higher than
3 the company had ever experienced and the Supreme Court decided that the
4 Commission should have made a determination as to whether those test year
5 expenses were abnormally high and therefore should have been averaged with
6 other years.

7 That is what the Company advocates in this case. The 2010 weather in
8 our service area was extreme, resulting in abnormally high kWh sales that cannot
9 be reasonably expected in the future. Accordingly, we have made adjustments to
10 more accurately project the Company's future kWh sales.

11 **Q. IN YOUR OPINION, DO THESE PRO FORMA ADJUSTMENTS**
12 **REFLECT KNOWN AND MEASURABLE CHANGES TO THE**
13 **COMPANY'S 2010 TEST YEAR OPERATING EXPENSES AND**
14 **REVENUES?**

15 A. Yes, the adjustments set forth above reflect known and measurable changes to the
16 Company's test year revenues and expenses.

17 **V. CONCLUSION**

18 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY?**

19 A. Yes.

DUKE ENERGY CAROLINAS
South Carolina Retail Adjusted Fuel and Fuel-Related Costs
Twelve Months Ended December 31, 2010
(\$000s)

Line No.	Description	Residential (Col. 1)	Commercial (Col. 2)	Industrial (Col. 3)	SC Retail (Col. 4)
1	SC retail sales, per books (MWH)	7,147,954	5,853,823	8,432,437	21,434,214
2	Weather adjustment (MWH)	(603,962)	(111,040)	(75,003)	(790,005)
3	SC retail sales, adjusted (MWH)	6,543,992	5,742,783	8,357,434	20,644,209
4	System fuel and fuel-related costs factors per KWH (¢/KWH)	2.3935	2.3935	2.3935	2.3935
5	Subtotal (line 4 times line 3) (\$ 000)	156,630	137,454	200,035	494,119
6	SC retail line loss differential (\$ 000)				(880)
7	Total adjusted SC retail fuel and fuel-related costs (\$000)				<u>\$ 493,239</u>

DUKE ENERGY CAROLINAS
 Calculation of Base Fuel and Fuel-Related Costs Factors
 Using Adjusted Test Period Twelve Months Ended December 31, 2010
 (\$000s)

Line No.	Description	Adjusted MWH	Fuel Costs	
			¢/KWH	Amount
1	Coal	34,576,876	3.872	1,338,692
2	Fuel oil and Natural gas	337,341	13.734	46,329
3	Combined Cycle Natural Gas	2,964,050	4.037	119,654
4	Biomass/Test Fuel	5,423	6.011	326
5	Reagents			33,004
6	Emission allowance gains, net*			(6,902)
7	Total fossil	37,883,690		1,531,103
8	Nuclear (Incl NFDC) (Net)	41,686,813	0.577	240,612
9	Catawba Joint Owners	14,695,350	0.566	83,176
10	Total nuclear (incl NFDC)	56,382,163		323,788
11	Total fossil and nuclear	94,265,853		1,854,891
12	Hydro	1,742,500		-
13	Net pumped storage	(816,169)		-
14	Total hydro	926,331		-
15	Solar Distributed Generation**	14,178		590
16	Total generation	95,206,362		1,855,481
17	Less Catawba Joint Owners	14,695,350		83,176
18	Net generation	80,511,012		1,772,305
19	Purchased Power - Fuel	1,919,663		31,229
20	Purchased Power - Non-Capacity	2,961,935		141,912
21	Renewable Purchased Power**	270,703		11,261
22	Total Purchased Power	5,152,301	3.579	184,402
23	Total Net Gen & Purchased Power	85,663,313		1,956,707
24	Line Loss and Company Use	(5,157,344)		-
25	Intersystem sales	(1,034,118)	5.196	(53,728)
26	Non-Capacity PP for Intersys Sales	(17,095)	7.289	(1,246)
27	System sales excl intersystem	79,454,756		1,901,733
28	Fuel and Fuel-Related Costs ¢/KWH			2.3935 ¢

* Includes emission allowances offset by emission expense

** Fuel costs represent avoided fuel costs @ \$41.60/MWh